

# Comparisons of Job Characteristics

**Focus Occupation:** [Physical Scientists, All Other \(19-2099\)](#)

**Associated Occupation:** [Life, Physical, and Social Science Technicians, All Other \(19-4099\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

|    |  |
|----|--|
| << | Focus occupation element is much lower             |
| <  | Focus occupation element is lower                  |
| 0  | Focus occupation element is at a similar level     |
| >  | Focus occupation element is at a higher level      |
| >> | Focus occupation element is at a much higher level |

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 65

**Focus Occupation:** Physical Scientists, All Other (19-2099)

**Associated Occupation:** Life, Physical, and Social Science Technicians, All Other (19-4099)

| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation                            |
|--|---------------------------------|--------------------------------|---------------------------|---|
| Computers and Electronics                      | 8.4                             | 15.0                           | 17.9                      | > Current knowledge level is likely sufficient            |
| Customer and Personal Service                  | 11.3                            | 14.6                           | 8.9                       | << Extensive education and/or training may be required    |
| Geography                                      | 3.9                             | 10.9                           | 21.7                      | >> Current knowledge level is likely more than sufficient |
| Biology  | 3.7                             | 10.6                           | 9.4                       | < Expanded education and/or training may be required      |
| Food Production                                | 2.1                             | 10.6                           | 1.4                       | << Extensive education and/or training may be required    |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 74

**Focus Occupation:** Physical Scientists, All Other (19-2099)

**Associated Occupation:** Life, Physical, and Social Science Technicians, All Other (19-4099)

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation                                  |
|---|---------------------------------|--------------------------------|---------------------------|---|
| Systems Analysis                            | 6.5                             | 9.2                            | 11.4                      | > Skill level is likely sufficient                              |
| Mathematics                                 | 6.2                             | 9.0                            | 12.2                      | >> Skill level is likely more than sufficient                   |
| Science                                     | 4.5                             | 9.0                            | 13.2                      | >> Skill level is likely more than sufficient                   |
| Equipment Maintenance                       | 3.5                             | 7.2                            | 1.8                       | << Extensive development of skills in this area may be required |
| Repairing                                   | 3.4                             | 6.9                            | 1.3                       | << Extensive development of skills in this area may be required |
| Equipment Selection                         | 3.3                             | 5.6                            | 1.5                       | << Extensive development of skills in this area may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

| Abilities  |                                 | Similarity of Focus Occupation to Associated Occupation: 92 |                           |                                |  |
|--|---------------------------------|---|---------------------------|--------------------------------|--|
| Focus Occupation: Physical Scientists, All Other (19-2099)<br>Associated Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099) |                                 |   |                           |                                |  |
| Associated Occupation's Key Abilities Elements   | Average Rating, All Occupations | Associated Occupation's Rating                              | Focus Occupation's Rating | Evaluation of Focus Occupation |  |
| Category Flexibility   | 9.0                             | 10.7  | 11.1                      | 0                              | Current ability level may be sufficient              |
| Mathematical Reasoning   | 6.3                             | 10.1  | 13.0                      | >>                             | Current ability level is likely more than sufficient |
| Flexibility of Closure   | 7.8                             | 9.7   | 10.6                      | 0                              | Current ability level may be sufficient              |
| Number Facility  | 6.3                             | 8.8   | 11.2                      | >                              | Current ability level is likely sufficient           |
| Time Sharing   | 6.6                             | 8.2   | 7.4                       | <                              | Some improvement in abilities may be required        |
| Depth Perception   | 5.3                             | 7.9   | 3.6                       | <<                             | Extensive improvement in abilities may be required   |
| Memorization   | 5.6                             | 7.3   | 7.5                       | 0                              | Current ability level may be sufficient              |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

There are no common work activities.

| Tools and Technologies that Both Occupations Have in Common  |             | Similarity of Focus Occupation to Associated Occupation: 85 |
|--|-------------|---|
| <b>Focus Occupation: Physical Scientists, All Other (19-2099)</b><br><b>Associated Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099)</b> |             |   |
| Tools and Technologies   | Exclusivity |   |
| Business function specific software  | 1           |   |
| Cameras  | 2           |   |
| Computers  | 1           |   |
| Content authoring and editing software   | 1           |   |
| Development software   | 4           |   |
| Industry specific software   | 1           |   |
| Information exchange software  | 1           |   |
| Light and wave generating and measuring equipment  | 4           |   |
| Network applications software  | 1           |   |
| Operating environment software   | 12          |   |
| Radar and sonar systems and components   | 24          |   |
| Spectroscopic equipment  | 10          |   |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.